

## CLAIMS

1. A cathode block for aluminum refining with 15 - 100 wt % of calcined coke, characterized in that the calcined coke  
5 is prepared by coking and calcining after mixing heavy crude oil containing 10 - 25 wt % of quinoline insoluble with 3 - 20 wt % of carbon black.
2. A cathode block for aluminum refining according to  
10 claim 1, wherein the heavy crude oil is coal tar pitch.
3. A cathode block for aluminum refining according to claim 1, wherein the heavy crude oil contains quinoline insoluble at 15 - 20 wt %.  
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4. A cathode block for aluminum refining according to claim 1, wherein the average particle diameter of the carbon black is more than 10 nm.
- 20 5. The manufacturing process of a cathode block for aluminum refining by adding binder pitch to the mixture of 15 - 100 wt % of calcined coke and 0 - 85 wt % of carbonaceous material, and then kneading, forming, baking and graphitizing, wherein the calcined coke is prepared by coking and calcining  
25 after mixing heavy crude oil containing 10 - 25 wt % of quinoline insoluble with 3 - 20 wt % of carbon black.